

IN THE CLAIMS:

Claims 3 and 6 were previously canceled. Claims 17 and 36 have been amended herein. All of the pending claims 1 through 46 are presented below. This listing of claims will replace all prior versions and listings of claims in the application. Please enter these claims as amended.

Listing of Claims:

1. (previously presented) A dry etchant, consisting essentially of:
a first component with the general formula $C_2H_xF_y$, where x is an integer from 3 to 5, inclusive, y is an integer from 1 to 3, inclusive, and $x + y = 6$; and
a second component consisting of at least one fluorocarbon,
the dry etchant being formulated to etch doped silicon dioxide with selectivity over at least undoped silicon dioxide.
2. (original) The dry etchant of claim 1, also being formulated to etch doped silicon dioxide with selectivity over silicon nitride.
3. (canceled)
4. (previously presented) The dry etchant of claim 1, wherein the first component is a primary etchant.
5. (previously presented) The dry etchant of claim 4, wherein the second component is an additive.
6. (canceled)
7. (previously presented) The dry etchant of claim 1, wherein the second component consists of at least one fluorocarbon having at least as many hydrogen atoms as fluorine atoms.

8. (previously presented) The dry etchant of claim 7, wherein the at least one fluorocarbon comprises at least one of CH_2F_2 and CH_3F .
9. (previously presented) The dry etchant of claim 1, wherein the fluorocarbon comprises at least one of CF_4 and CHF_3 .
10. (previously presented) The dry etchant of claim 5, wherein the additive increases a rate with which the dry etchant etches doped silicon dioxide over a rate at which the first component alone etches doped silicon dioxide.
11. (previously presented) The dry etchant of claim 10, wherein the additive comprises at least one of CF_4 and CHF_3 .
12. (previously presented) The dry etchant of claim 5, wherein the additive increases a selectivity with which the first component etches doped silicon oxide over at least undoped silicon dioxide over the selectivity of the first component alone.
13. (previously presented) The dry etchant of claim 12, wherein the additive comprises at least one of CH_2F_2 and CH_3F .
14. (previously presented) The dry etchant of claim 5, wherein the additive increases a selectivity of the first component for one type of doped silicon dioxide over another type of doped silicon dioxide over the selectivity of the first component alone.
15. (previously presented) The dry etchant of claim 1, wherein the first component comprises an additive and the second component comprises a primary etchant.

16. (previously presented) The dry etchant of claim 15, wherein the primary etchant comprises at least one of CF_4 and CHF_3 .

17. (currently amended) The dry etchant of claim 15, wherein a combination of the first component and the primary etchant etches doped silicon dioxide with greater selectivity over at least undoped silicon dioxide than a ~~selectively~~ selectivity of the primary etchant alone.

18. (previously presented) The dry etchant of claim 15, wherein a combination of the first component and the primary etchant etches doped silicon dioxide at substantially a same rate as an etchant that includes the primary etchant but not the first component etches doped silicon dioxide.

19. (previously presented) The dry etchant of claim 1, wherein relative concentrations of the first component and the second component are tailored to provide for at least one of a particular etch selectivity of doped silicon dioxide over undoped silicon dioxide, a particular etch selectivity of doped silicon dioxide over silicon nitride, and a particular etch rate of doped silicon dioxide.

20. (previously presented) A dry etchant consisting essentially of at least one fluorocarbon, the at least one fluorocarbon comprising a component with the general formula $\text{C}_2\text{H}_x\text{F}_y$, where x is an integer from 3 to 5, inclusive, y is an integer from 1 to 3, inclusive, and $x + y = 6$, the dry etchant being formulated to etch doped silicon dioxide at a faster rate than at least undoped silicon dioxide.

21. (original) The dry etchant of claim 20, also being formulated to etch doped silicon dioxide at a faster rate than silicon nitride.

22. (original) The dry etchant of claim 20, including a combination of components.

23. (previously presented) The dry etchant of claim 22, wherein the component is a primary etchant.

24. (original) The dry etchant of claim 23, further comprising an additive.

25. (previously presented) The dry etchant of claim 24, wherein the additive comprises a halogenated carbon dry etchant material.

26. (previously presented) The dry etchant of claim 24, wherein the additive comprises a fluorocarbon having at least as many hydrogen atoms as fluorine atoms.

27. (previously presented) The dry etchant of claim 26, wherein the fluorocarbon comprises at least one of CH_2F_2 and CH_3F .

28. (previously presented) The dry etchant of claim 24, wherein the additive comprises at least one of CF_4 and CHF_3 .

29. (previously presented) The dry etchant of claim 23, wherein the additive increases a rate with which the dry etchant etches doped silicon dioxide over a rate at which the component alone etches doped silicon dioxide.

30. (previously presented) The dry etchant of claim 29, wherein the additive comprises at least one of CF_4 and CHF_3 .

31. (previously presented) The dry etchant of claim 23, wherein the additive increases a selectivity with which the dry etchant etches doped silicon oxide over at least undoped silicon dioxide over the selectivity of the component alone.

32. (previously presented) The dry etchant of claim 31, wherein the additive comprises at least one of CH_2F_2 and CH_3F .
33. (previously presented) The dry etchant of claim 23, wherein the additive increases a selectivity of the dry etchant for one type of doped silicon dioxide over another type of silicon dioxide over the selectivity of the component alone.
34. (previously presented) The dry etchant of claim 22, wherein the component comprises an additive for use with another, primary etchant.
35. (previously presented) The dry etchant of claim 34, wherein the primary etchant comprises at least one of CF_4 and CHF_3 .
36. (currently amended) The dry etchant of claim 34, wherein the combination of the component and the primary etchant etches doped silicon dioxide with greater selectivity over at least undoped silicon dioxide than a ~~selectively~~ selectivity of the primary etchant alone.
37. (previously presented) The dry etchant of claim 34, wherein the combination of the component and the primary etchant etches doped silicon dioxide at a substantially normal rate.
38. (previously presented) The dry etchant of claim 22, wherein relative concentrations of the component and the primary etchant in the combination are tailored to provide for at least one of a particular etch selectivity of doped silicon dioxide over undoped silicon dioxide, a particular etch selectivity of doped silicon dioxide over silicon nitride, and a particular etch rate of doped silicon dioxide.

39. (previously presented) The dry etchant of claim 1, wherein the first component comprises up to about 65% of a total gas flow of the dry etchant.

40. (previously presented) The dry etchant of claim 1, wherein the first component comprises up to about 40% of a total gas flow of the dry etchant.

41. (previously presented) The dry etchant of claim 40, wherein the second component comprises up to about 60% of the total gas flow.

42. (previously presented) The dry etchant of claim 1, further including at least one carrier gas.

43. (previously presented) The dry etchant of claim 20, wherein the component comprises up to about 65% of a total gas flow of the dry etchant.

44. (previously presented) The dry etchant of claim 20, wherein the component comprises up to about 40% of a total gas flow of the dry etchant.

45. (previously presented) The dry etchant of claim 43, wherein at least one other component comprises up to about 60% of the total gas flow.

46. (previously presented) The dry etchant of claim 20, further including at least one carrier gas.